

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method ~~for verifying the transfer of a fluid from a first composition to a second composition~~ comprising:

providing a first composition having a first fluid therein;

providing a second composition having a second fluid therein, wherein said second composition includes a predetermined amount of luminescent semiconductor nanocrystals capable of emitting electromagnetic radiation in a narrow wavelength band when excited;

transferring all or a portion of said second composition into said first composition to form a third composition;

exposing said third composition to energy capable of exciting said luminescent semiconductor nanocrystals; [[and]]

detecting the electromagnetic radiation emitted from said luminescent semiconductor nanocrystals in said third composition; and

quantifying the luminescent semiconductor nanocrystals in said third composition to verify the volume of said second composition into said first composition to form said third composition.

2. Canceled.

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b. (Original) The method according to claim 1, wherein said semiconductor nanocrystal is a core/shell nanocrystal.

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c. (Original) The method according to claim 1, wherein said semiconductor nanocrystal has a diameter between about 2 nm and about 50 nm.

⁴ ³
d. (Original) The method according to claim ³4, wherein said semiconductor nanocrystal has a diameter between about 2 nm and about 20 nm.

⁵
6. (Original) The method according to claim 1, wherein said semiconductor nanocrystal is selected from the group consisting of ZnS, ZnSe, ZnTe, CdS, CdSe, CdTe, HgS, HgSe, HgTe, MgS, MgSe, MgTe, CaS, CaSe, CaTe, SrS, SrSe, SrTe, BaS, BaSe, BaTe, and mixtures thereof.

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7. (Original) The method according to claim ²6, wherein said semiconductor nanocrystal has a core which comprises CdSe.

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8. (Original) The method according to claim ⁶7, wherein said semiconductor nanocrystal has a shell which comprises CdS.

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9. (Original) The method according to claim ⁶7, wherein said semiconductor nanocrystal has a shell which comprises ZnS.

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10. (Original) The method according to claim 1, wherein said semiconductor nanocrystals are monodisperse.

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11. (Original) The method according to claim ²6, wherein said semiconductor nanocrystal has a core diameter between about 2 nm and about 50 nm.

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12. (Original) The method according to claim ²6, wherein said semiconductor nanocrystal has a core diameter between about 2 nm and about 6 nm.

¹²
13. (Original) The method according to claim ¹⁰11, wherein said semiconductor nanocrystal includes a shell having a thickness of about 2 nm.

¹³
14. (Original) The method according to claim ¹¹12, wherein said semiconductor nanocrystal includes a shell having a thickness of about 2 nm.

¹⁴
15. (Currently Amended) The method according to claim 1, wherein said second fluid comprises a target and ~~method further comprises that~~ said semiconductor nanocrystal is linked to the ~~the~~ target ~~present in said second fluid~~.

¹⁵
16. (Currently Amended) The method according to claim 1, wherein said method is used in ~~further comprising the step of~~ nucleic acid testing.

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17. (Currently Amended) The method according to claim 1, wherein the luminescent semiconductor nanocrystals are present in the second composition in an amount from about 0.0002 nanomolar to about 20 nanomolar.

18-36. Canceled.